

cooked grain has the advantageous properties of gelatinization of the starch and the ... berries are both evenly and completely cooked.” Further, the only example teaches fully cooking the wheat berries. Although Whitney does state “substantially fully cooked” in col. 3, line 2, as stated by the Examiner, this has to be read in context with the entire specification which clearly indicates that the intent of the invention is to fully cook the berries and thus fully gelatinize the starch. Such intent is further evident from the background of the invention which states that the prior art method of batch cooking has the major disadvantage of inconsistency of cook.

In contrast, the present invention is directed to grain in which the granular structure is not completely destroyed. The Examiner has alleged that it is not clear what range of gelatinization the claimed language of “not completely destroyed” covers. Once again, the language must be read in conjunction with the specification which states at page 9 that to obtain a high level of total dietary fiber and/or resistant starch, the granular structure is not completely destroyed. The specification then expounds upon this concept, stating that the component starch granule may be partially swollen, but its crystallinity is not completely destroyed. The term granular is then defined as a starch that retains at least part of its granular structure, thereby exhibiting some crystallinity, so that the granules are birefringent. Thus, the specification clearly indicates the degree of gelatinization; that is that the starch is not fully gelatinized.

Whitney teaches away from the present invention in that the intent is to fully cook (gelatinize) the starch of the grain which would not result in the increased level of total dietary fiber and/or resistant starch obtained in the present invention.

To further support Applicants claim that the process of Whitney gelatinizes the starch, destroying its granular structure and birefringence, Applicants respectfully request that the enclosed declaration under Rule 132 (37 C.F.R. §1.132) of Dr. Yong-Cheng Shi be entered. Dr. Shi has extensively worked in the area of starch. Under Dr. Shi’s supervision and guidance, the Example of Whitney was conducted and the starch of the cooked grain was compared to that of the heat-treated grain of the present application. The experiment shows that the starch in Whitney has been completely gelatinized such that it is no longer birefringent. Thus, it is clear that Whitney does not anticipate the present invention.

Claims 3, 6-7, 9 and 16-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitney, et al. (US 5,972,413) in view of Ferguson, et al.

(US 5,300,145). As detailed above, the amended claims differ from those of Whitney, inter alia in that the starch is not gelatinized. Ferguson does not remedy this deficiency.

In view of the foregoing, Applicant submits the Application is now in condition for allowance and respectfully requests early notice to that effect.

Respectfully submitted,

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Appendix A
(marked up amended claims)

1. A method for preparing a grain containing starch with increased total dietary fiber content comprising heating a base grain having a total moisture content of from about 20% to about 45% by weight based on the dry weight of the grain, at a temperature of from about 90°C to about 130°C for a period of about 0.5 to 24 hours, under a combination of moisture and temperature conditions such that the starch does not have its granular structure and birefringence completely destroyed and to provide a heat-treated-grain having an increase in total dietary fiber content ("TDF") of at least 10%.